

**United States Environmental Protection Agency
Criminal Investigation Division
Investigative Activity Report**

Case Number

0900-M311

Case Title:

NORTHROP GRUMMAN - BENCHMARK

Reporting Office:

San Francisco, CA, Area Office

Subject of Report:

INTERVIEW OF

ON MAY 3, 2012

Activity Date:

May 11, 2012

Reporting Official and Date:

, ASAC

11-MAY-2012, Signed by:

, ASAC

Approving Official and Date:

, SAC

11-MAY-2012, Approved by:

SAC

SYNOPSIS

On the above referenced date, EPA-CID Special Agent interviewed about the former Benchmark (Benchmark) Technology facility located in the City of Industry, California. The facility manufactured printed circuit boards and was owned and operated by TRW Incorporated before the Northrop Grumman Corporation acquired TRW in 2002. The site is part of the San Gabriel Valley Superfund Site, Area 4 (also known as the Puente Vallery Operable Unit, or PVOU). is the US EPA Remedial Project Manager in charge of the site. The interview took place at the EPA-CID San Francisco Area Office. This was second interview with EPA-CID about this site.

DETAILS

provided the following information; Benchmark is a former circuit board manufacturing facility that began operation in the mid-1950's and was purchased by TRW Incorporated in the 1960's. In 1984, the state and federal government became aware of soil and groundwater contamination at Benchmark. A large plume of chlorinated solvent contaminated groundwater was found to be migrating north of the Benchmark site. In 1989, the Los Angeles Regional Water Quality Control Board (LARWQCB) issued a Cleanup and Abatement Order 89-043 ordering TRW to remediate groundwater and contaminated soil. At the time, was employed by TRW and was the Project Manager in charge of the remediation efforts for the company. , Woodward Clyde Environmental Consulting, was the day-to-day lead consultant for TRW on the project.

In the early 1990's, several soil vapor extraction wells ("Z" series wells) and ground water extraction/monitoring ("W" series "pump and treat" wells) were installed and put into use to remediate contaminated groundwater. W and Z wells are approximately 35 to 60 feet in depth. Soils contaminated with volatile organic compounds (VOCs) were thermally treated on-site. Treated groundwater from a small pump and treat system was discharged from the site. For a time, TRW/Northrop had an NPDES permit that regulated the discharge of the treated groundwater. Orion Environmental Consulting (Orion) and Camp, Dresser, and McKee (CDM) were (and continue to be) involved in clean-up efforts at Benchmark.

In 1998, the LARWQCB issued a "No Further Action" letter to TRW establishing that no additional soil remediation was necessary at Benchmark. Treatment of contaminated groundwater continued.

In 2002, TRW was sold to Northrup-Grumman Company (NGC). The sale includes the Benchmark

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and the site's environmental liabilities. retained position as Project Manager of the site and become an NGC employee. started own firm ("Watermark") and remained involved in the project as a hired consultant. CDM and Orion also remain involved in clean-up efforts.

In 2002, NGC instructed Orion to dig a series of Cone Penetrometer Test (CPT) borings at the Benchmark site. The CPT borings were dug (by a subcontractor to Orion) to a depth of approximately 94 feet and provide Orion and NGC with lithologic data. Discrete depth groundwater samples were collected from the various CPT borehole sites at Benchmark. Analysis of those samples was conducted and data was accumulated by Orion for NGC. Results indicate that the plume of contaminated groundwater is larger, deeper, and more concentrated than previously believed. The plume contains 1,1 DCE and 1,4 dioxane, chlorinated solvents historically used by Benchmark when circuit boards were manufactured at the site. TRW and NGC both acknowledged that those contaminants in the plume originated at the Benchmark site. In July and August of 2003, Orion generates data for NGC that details the size, concentration, and migration of the plume. This information is not shared with the LARWQCB or US EPA.

On October 1, 2003, the LARWQCB issued a new Clean Up and Abatement Order (CAO) Number R4-2003-21 to NGC. The CAO instructs NGC to better assess and remediate the contaminated groundwater plume down gradient from Benchmark. The LARWQCB issued the CAO without knowing that Orion and NGC had recently compiled subsurface lithology and analytical data taken from the CPT bore holes. On October 29, 2003, the LARWQCB rescinded CAO R4-2003-21 after NGC threatened legal action to contest the order. NGC and Orion continue to be silent on the existence of data that was previously accumulated from the CPT borings at Benchmark.

explained that the plume originating at Benchmark is migrating north of the site. The plume is moving under a developed portion of the City of Industry. Puente Creek is a natural creek (now concrete-lined) located north of Benchmark. The creek flows east to west. As a result of negotiations concluded in 2002, TRW (then later NGC) agreed to take responsibility for the groundwater contamination in the "Intermediate Zone" of the PVOU. Carrier Corporation (Carrier) agreed to assume the responsibility for the "Shallow Zone" plume north of Puente Creek. Chavira stated that Carrier manufactured air conditioning units in a facility located many miles upgradient from Benchmark. Carrier has chemical records indicating that the company historically had significant losses of chlorinated solvents that contaminated groundwater. For reasons unknown to Carrier agreed to take responsibility for a portion of the Shallow Zone plume many miles away from where Carrier contaminated the groundwater reiterated that the presence of 1,1 DCE and 1,4 dioxane in the plume from Benchmark (and north) has been acknowledged by NGC (and previously, TRW) as having come from Benchmark.

In 2007, Carrier installed deeper extraction wells north of Puente Creek. The new wells added to the extraction well system already in place and installed by Carrier in 2006 and 2007. Analytical data from samples collected from this new well suggested the contaminated plume ran deeper than previously believed by US EPA. In verbal communications with US EPA, NGC stated that the agency and CH2M Hill (the US EPA contractor interpreting the new data) was misinterpreting this new data. At no time did NGC or Orion tell US EPA or CH2M Hill that the CPT data collected from Benchmark in 2002 existed, or that the 2002 CPT data supported the new 2007 extraction well

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data.

In 2008, [redacted] replaced [redacted] as the site's Remedial Project Manager. In 2010, the LARWQCB transferred its status as lead regulatory agency to US EPA. According to NGC's [redacted] did not oppose the transfer, as long as US EPA does not require "additional work" at the site.

[redacted] stated that at a meeting with NGC, [redacted] and US EPA was held on February 8, 2011. During that meeting, NGC claimed that US EPA was in possession of all of the data available on groundwater contamination associated with the Benchmark site. The issue of the contaminated plume being deeper was discussed as an issue at the meeting; [redacted] stated that if the plume did run deeper than was understood at the time, it would not be a problem because it would be captured by the Carrier extraction wells north of Puente Creek. [redacted] acknowledged to the reporting agent that the extraction wells present north of the creek were deep enough to capture the contaminated plume as it migrates north.

On September 16, 2011, US EPA issued a Unilateral Administrative Order (UAO) that ordered NGC to conduct additional investigation and characterization of the contaminated groundwater originating at the Benchmark site. On November 29, 2011, NGC submitted data to US EPA detailing the size, concentration, and migration of the contaminated groundwater plume. The 2002 CPT borehole data detailing the true size and concentration of the plume was not included in these submissions to US EPA.

On December 8, 2011, [redacted] attended a meeting with [redacted] (NGC), Orion, and Department of Toxic Substances Control (DTSC) representatives at the DTSC office in Sacramento, California. Orion representatives delivered a PowerPoint presentation at the meeting that detailed environmental conditions (including groundwater contamination) at Benchmark. The PowerPoint was titled "History and Current Status of SZ-South Remedy", and dated "12/8/11" (see Attachment #1). It was during this presentation that [redacted] noticed a slide that referenced the existence of the CPT boreholes and the depth to which the boreholes had been dug in 2002. [redacted] immediately began to ask questions about the referenced data on the slide; neither [redacted] nor the Orion officials would make any comments about the CPT boreholes or any associated data. [redacted] stated to the reporting agent that the CPT boreholes and associated data appeared to have been inadvertently included in the PowerPoint by Orion officials. According to [redacted], slides 12, 13, and 14 contain information not previously disclosed to US EPA or the LARWQCB. Slide 16 showed a generalized cross-section which omits relevant data from the 2002 CPT borehole study. Slide 28 is a cross section (prepared in November 2011) of the Benchmark property that also omits information from the 2002 CPT borehole study.

A follow-up meeting was held on January 31, 2012, between [redacted], Orion representatives, and [redacted]. The meeting was held in Irvine, California, and included a discussion about the previously unknown 2002 CPT boreholes, associated CPT data, and other information not provided to US EPA about the Benchmark site. Orion officials admitted that the CPT data had not been shared with regulatory agencies (including US EPA) and that the data was a part of what Orion referred to as the 2002 "Deep Source Investigation" (referenced in the 12/8/2011 PowerPoint presentation, Slide 12). At the meeting, [redacted] claimed that [redacted] did not recall if the data had ever

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been produced to regulators or not.

On March 16, 2012, [redacted] sent a letter to [redacted] that is a response to an information request sent to NGC by US EPA ([redacted]). In the letter (see Attachment #2), [redacted] makes several claims. [redacted] acknowledges that the 2002 CPT data was not shared with regulators and that it was thought to be "essentially irrelevant". [redacted] adds that he and NGC officials anticipated that NGC would be instructed to install and operate an off-site extraction system that would capture contamination at a greater depth. [redacted] also references in [redacted] letter a May 2003 Groundwater Monitoring Report submitted to the LARWQCB by NGC. In this report, NGC apparently makes a reference to the existence of the CPT boreholes and the collection of samples. According to [redacted] the May, 2003, report referenced by [redacted] does not include any specific reference to the actual CPT analytical data generated or interpreted.

[redacted] informed the reporting agent that had the LARWQCB or US EPA known about the existence and significance of the 2002 CPT data, NGC would have been required to address the deeper Benchmark groundwater contamination with a much more significant (and expensive) remediation plan. [redacted] opined that NGC appeared to ignore the 2002 CPT data in the hopes the contamination would migrate north of Puente Creek and become the legal liability of Carrier.

According to [redacted], drinking water wells operated by San Gabriel Valley Water Company and Suburban Water Systems north of the contaminated Benchmark plume have already been impacted by Benchmark-related contaminated groundwater. Several wells have been closed and several new ones have been installed at greater depth to avoid additional contamination.

ATTACHMENT

Orion PowerPoint, 12/8/2011, Attachment 1

Letter, 3/16/2012, Attachment 2

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